

SUBSTITUTE FOR FORM 1449A/PTO (Modified) (Use as many sheets as necessary)	Attorney Docket No.: 074451.P134	Application Number: 09/894,524
	First Named Inventor: Filing Date:	Martin Boliek June 27, 2001

U.S. PATENT DOCUMENTS

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FOREIGN PATENT DOCUMENTS

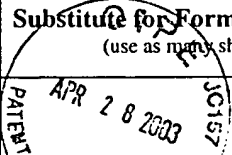
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Examiner Signature		Date Considered	12/05/04
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¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard S.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

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	First Named Inventor: Martin Boliek	
	Filing Date: June 27, 2001	

OTHER ART - NO PATENT LITERATURE DOCUMENTS

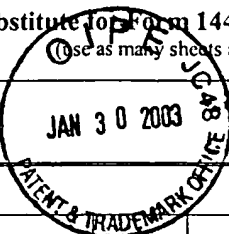
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	Translation ²
lf	F	Wu, G.K., et al., "New Compression Paradigms in JPEG2000", Applications of Digital Image Processing XXIII, San Diego, CA USA, July 31-Aug 3, 2000, vol. 4115, pp. 418-429, XP008013391, Proceedings of the SPIE - The International Society for Optical Engineering, 2000, SPIE-Int. Soc. Opt. Eng., USA.	RECEIVED APR 29 2003
hl	G	Boliek, M., et al., "JPEG 2000 for Efficient Imaging In a Client/Server Environment", Proceeding of the PIE, SPIE, Bellingham, VA, US, vol. 4472, July 31, 2000, pp. 212-223, XP008010308.	
hl	H	Marcellin, M.W., et al., "An Overview of JPEG-2000", Proceedings. DCC 2000 Snowbird, UT, USA, March 28-30, 2000, pp. 523-541, XP010377392.	

Examiner Signature		Date Considered	10/06/04
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OTHER ART - NO PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume- issue number(s), publisher, city and/or country where published	Translation ²
uf	B	Sachin Deshpande and Wenjun Zeng, "HTTP Streaming of JPEG 2000 Images", <u>IEEE</u> (2001), pp. 15-19	
u1	C	"JPEG 2000 PART I FINAL COMMITTEE DRAFT VERSION 1.0", ISO/IEC FCD15444-1:2000 (V1.0, 16 March 2000), pp. 13-52.	
hp	D	Martin Boliek, Michael J. Gormish, Edward L. Schwartz, and Alexander Keith, "Decoding compression with reversible embedded wavelets (CREW) codestreams", <u>Journal of Electronic Imaging</u> , July 1998, Vol. 7(3), pp. 402-409.	
hl	E	Robert Blumberg and Peter Huges, "Visual Realism and Interativity for the Internet", <u>IEEE</u> (1997), pp. 269-273.	
hu	F	Christopher R. Hauf and J. Scott Houchin, "The FlashPix™ Image File Format", <u>The Fourth Color Imaging Conference: Color Science, Systems and Application</u> (1996), pp. 234-238.	

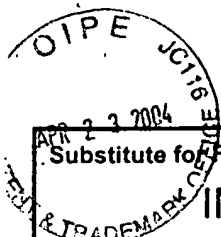
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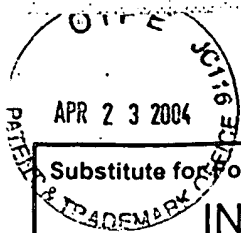
Application Number	09/894,524
Filing Date	6/27/2001
First Named Inventor:	Martin Boliek
Art Unit	2152
Examiner Name	Not Yet Assigned
Attorney Docket Number	074451.P134

Sheet 1 of 8

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)				
hl hl hl hl hl hl hl hl hl hl hl hl hl hl		us-	3,580,655	5/25/1971	Leith et al.	
		us-	3,950,103	4/13/1976	Schmidt-Weinmar	
		us-	4,136,954	1/30/1979	Jamieson	
		us-	4,155,097	5/15/1979	Lux	
		us-	4,190,861	2/26/1980	Lux	
		us-	4,223,354	9/16/1980	Noble et al.	
		us-	4,393,456	7/12/1983	Marshall, Jr.	
		us-	4,437,087	3/13/1984	Petr	
		us-	4,569,075	2/4/1986	Nussbaumer	
		us-	4,599,567	7/8/1986	Goupillaud et al.	
		us-	4,652,881	3/24/1987	Lewis	
		us-	4,663,660	5/5/1987	Fedele et al.	
		us-	4,674,125	6/16/1987	Carlson et al.	
		us-	4,701,006	10/20/1987	Perlmutter	
	us-	4,751,742	6/14/1988	Meeker		
N hl						

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INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

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Art Unit	2152
Examiner Name	Not Yet Assigned
Attorney Docket Number	074451.P134

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U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)				
RD		us-	4,985,927	1/15/1991	Norwood et al.	
		us-	4,987,480	1/22/1991	Lippman et al.	
		us-	4,999,705	3/12/1991	Puri	
		us-	5,000,183	3/19/1991	Bonnefous	
		us-	5,001,764	3/19/1991	Wood et al.	
		us-	5,014,134	5/7/1991	Lawton et al.	
		us-	5,018,210	5/21/1991	Merryman et al.	
		us-	5,049,992	9/17/1991	Citta et al.	
		us-	5,049,993	9/17/1991	Le Gall et al.	
		us-	5,068,911	11/26/1991	Resnikoff et al.	
		us-	5,072,308	12/10/1991	Lin et al.	
		us-	5,073,964	12/17/1991	Resnikoff	
		us-	5,081,645	1/14/1992	Resnikoff et al.	
		us-	5,095,447	3/10/1992	Manns et al.	
		us-	5,097,261	3/17/1992	Langdon, Jr. et al.	
		us-	5,097,331	3/17/1992	Chen et al.	
		us-	5,101,280	3/31/1992	Moronaga et al.	
		us-	5,101,446	3/31/1992	Resnikoff et al.	
		us-	5,103,306	4/7/1992	Weiman et al.	
		us-	5,109,451	4/28/1992	Aono et al.	
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		us-	5,235,434	8/10/1993	Wober	
		us-	5,241,395	8/31/1993	Chen	
		us-	5,262,958	11/16/1993	Chui et al.	
		us-	5,276,525	1/4/1994	Gharavi	
		us-	5,315,670	5/24/1994	Shapiro	
		us-	5,321,776	6/14/1994	Shapiro	
		us-	5,335,016	8/2/1994	Nakagawa	
		us-	5,347,479	9/13/1994	Miyazaki	
		us-	5,349,348	9/20/1994	Anderson et al.	
		us-	5,379,355	1/3/1995	Allen	
		us-	5,381,145	1/10/1995	Allen et al.	
		us-	5,384,869	1/24/1995	Wilkinson et al.	
		us-	5,412,741	5/2/1995	Shapiro	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Filing Date	6/27/2001
First Named Inventor:	Martin Boliek
Art Unit	2152
Examiner Name	Not Yet Assigned
Attorney Docket Number	074451.P134

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U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)				
[Handwritten Initials]		US-	5,414,780	5/9/1995	Carnahan	
		US-	5,416,604	5/16/1995	Park	
		US-	5,420,891	5/30/1995	Akansu	
		US-	5,453,945	9/26/1995	Tucker et al.	
		US-	5,455,874	10/3/1995	Ormsby et al.	
		US-	5,481,308	1/2/1996	Hartung et al.	
		US-	5,495,292	2/27/1996	Zhang et al.	
		US-	5,497,435	3/5/1996	Berger	
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		US-	5,534,925	7/9/1996	Zhong	
		US-	5,537,493	7/16/1996	Wilkinson	
		US-	5,541,594	7/30/1996	Huang et al.	
		US-	5,442,458	8/15/1995	Rabbani et al.	
		US-	5,546,477	8/13/1996	Knowles et al.	
		US-	5,563,960	10/8/1996	Shapiro	
[Handwritten Initials]		US-	5,566,089	10/15/1996	Hoogenboom	
		US-	5,602,589	2/11/1997	Vishwanath et al.	
		US-	5,631,977	5/20/1997	Koshi	
		US-	5,638,498	6/10/1997	Tyler et al.	
		US-	5,657,085	8/12/1997	Katto	
		US-	5,701,367	12/23/1997	Koshi et al.	
		US-	5,717,789	2/10/1998	Anderson, et al.	
		US-	5,754,793	5/19/1998	Eom et al.	
		US-	5,808,683	9/15/1998	Tong et al.	
		US-	5,809,176	9/15/1998	Yajima	
		US-	5,850,482	12/15/1998	Meany et al.	
		US-	5,867,602	2/2/1999	Zandi et al.	
		US-	5,880,856	3/9/1999	Ferriere	
		US-	5,966,465	10/12/1999	Keith et al.	
		US-	6,020,975	2/1/2000	Chen et al.	
		US-	6,026,198	2/15/2000	Okada	
		US-	6,088,062	7/11/2000	Kanou et al.	
		US-	6,101,279	8/8/2000	Nguyen et al.	
		US-	6,118,902	9/12/2000	Knowles	
		US-	6,121,970	9/19/2000	Guedalia	
		US-	6,128,413	10/3/2000	Benamara	
		US-	6,160,846	12/12/2000	Chiang	
		US-	6,201,897 B1	3/13/2001	Nixon	
		US-	6,229,929 B1	5/8/2001	Lynch et al.	
		US-	6,236,765 B1	5/22/2001	Archarya	
		US-	6,237,010 B1	5/22/2001	Hui et al.	
		US-	6,263,109 B1	7/17/2001	Ordentlich et al.	
		US-	6,263,120 B1	7/17/2001	Matsuoka	

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Application Number	09/894,524
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First Named Inventor:	Martin Boliek
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Examiner Name	Not Yet Assigned
Attorney Docket Number	074451.P134

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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

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Application Number	09/894,524
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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
W		EPO	0510933	A1	10/28/1992	Canon Kabushiki Kaisha		
W		EPO	0593013	A2	4/20/1994	Kabushiki Kaisha Toshiba		
W		EPO	0611051	A1	8/17/1994	Canon Kabushiki Kaisha		
W		EPO	0622741	A2	11/2/1994	Klics, Ltd.		
W		EPO	0967556	A2	12/29/1999	Hewlett-Packard Co.		
W		EPO	1035511	A2	9/13/2000	Canon Kabushiki Kaisha		
W		EPO	1164781	A1	12/19/2001	Matsushita Electric Ind. Co., Ltd		
W		EPO	701375	A2	3/13/1996	Xerox Corporation		
W		JP	06-245077		9/2/1994	Nec Corp.		
W		JP	406038193	A	7/17/1992	Casio Computer Co. Ltd.		
W		JP	6-350989		12/22/1994	Fuji Photo Film Co. Ltd.		
W		JP	7-79350		3/20/1995	Fuji Photo Film Co. Ltd.		
W		PCT WO	00/49571		8/24/2000	Digital Accelerator Corp.		
W		PCT WO	01/16764	A1	3/8/2001	Rtimage Inc.		
W		PCT WO	88/10049		12/15/1988	Eastman Kodak Co.		
W		PCT WO	91/03902		3/21/1991	Aware, Inc.		
W		PCT WO	91/18361		11/28/1991	Yale University		
W		PCT WO	93/10634		5/27/1993	General Electric Co.		
W		PCT WO	94/17492		8/4/1994	David Sarnoff Research Ctr., Inc.		
W		PCT WO	94/23385		10/13/1994	Lewis, Adrian		
W		PCT WO	95/19683		7/20/1995	Houston Advanced Research Ctr.		
W		PCT WO	96/09718		3/28/1996	Houston Advanced Research Ctr.		
W		UK GB	2 211 691	A	7/5/1989	Hitachi Ltd.		
W		UK GB	2 284 121	A	5/24/1995	State of Israel- Ministry of Defence		
W		UK GB	2 285 374	A	7/5/1995	Ricoh Company Ltd.		
W		UK GB	2 293 733	A	4/3/1996	Ricoh Company Ltd.		
W		UK GB	2 293 734	A	4/3/1996	Ricoh Company Ltd.		
W		UK GB	2 303 030	A	2/5/1997	Ricoh Company Ltd.		
W		UK GB	2 303 031	A	2/5/1997	Ricoh Company Ltd.		
W		UK GB	2 341 035	A	3/1/2000	Ricoh Company Ltd.		

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First Named Inventor:	Martin Boliek
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Sheet 6 of 8

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
W		ANTONINI, et al., "Image Coding Using Wavelet Transform", <u>IEEE Transactions on Image Processing</u> , Vol 1, No. 2, April 1992, pp. 205-220.	
W		BLUMBERG, et al., "Visual Realism and Interactivity for the Internet", IEEE, 1997, pp. 269-273.	
W		BOLIEK, et al., "Decoding compression with reversible embedded wavelets (CREW) codestreams", <u>Journal of Electronic Imaging</u> , July 1998, vol. 7 (3), pp. 402-409.	
W		BOLIEK, et al., "JPEG 2000 for Efficient Imaging in a Client/Server Environment", <u>Proceeding of the PIE, SPIE, Bellingham, VA, US</u> , Vol. 4472, July 31, 2001, pp. 212-223, XP008010308.	
W		BOLIEK, et al., "JPEG 2000 Next Generation Image Compression System", IEEE 0-7803-6297, 45-48	
W		CALDERBANK, et al., "Wavelet Transforms That Map Integers to Integers", August 1996.	
W		CAREY, et al: "Regularity-Preserving Image Interpolation", <u>IEEE Transactions on Image Processing</u> , Vol. 8., No. 9, September 1999, pgs. 1293-1297, XP002246254.	
W		CARRATO, et al: "A Simple Edge-Sensitive Image Interpolation Filter", <u>Proceedings of the International Conference on Image Processing (ICIP) Lausanne, Sept. 16-19, 1996, New York, IEEE, US</u> , vol. 1, pgs. 711-714, XP010202493.	
W		CHEN, et al., "Wavelet Pyramid Image Coding with Predictable and Controllable Subjective Picture Quality", <u>IEICE Trans. Fundamentals</u> , Vol. E76-A., No. 9, September 1993, pp. 1458-1468.	
W		CHEONG, et al., "Subband Image Coding with Biorthogonal Wavelets", <u>IEICE Trans. Fundamentals</u> , Vol. E75-A., No. 7, July 1992, pp. 871-881.	
W		CHRYSAFIS, et al., "An Algorithm for Low Memory Wavelet Image Compression", IEEE 0-7803-5467-2/99, pg. 354-358.	
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Application Number	09/894,524
Filing Date	6/27/2001
First Named Inventor:	Martin Boliek
Art Unit	2152
Examiner Name	Not Yet Assigned
Attorney Docket Number	074451.P134

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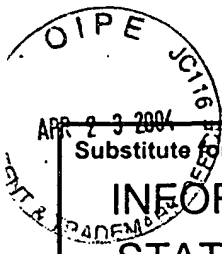
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NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
lw		GHARAVI, et al., "Sub-band Coding of Digital Images Using Two-Dimensional Quadrature Mirror Filtering", SPIE Vol. 707 Visual Communications and Image Processing, 1986, p. 51-61.	
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W		SHAH, et al., "A Chip Set for Lossless Image Compression", <u>IEEE Journal of Solid-State Circuits</u> , Vol. 26, No. 3, March 1991, pp. 237-244.	
W		SHAPIRO, J. M., "An Embedded Hierarchical Image Coder Using Zerotrees of Wavelet Coefficients", <u>IEEE</u> , 1993, pp. 214-223.	
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Examiner Signature	Date Considered
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